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CONTENTS

GERMAN DEMOCRATIC REPUBLIC

ERRATUM: In JPRS 81934 of 6 October 1982, No 2322 of this series, the article entitled "progress in Rail Electrification in 1981 Cited" on pages 41-46 should carry the following subslug:

[Article by Juergen Meinecke, engineer, deputy director, General Engineering Office for the Electrification of the German Railway System, Leipzig: "Electrification of the German Railway System in 1981"]

HUNGARY

Minister Elaborates on Tough Requirements for Economic Performance (Istvan Hetenyi; NEPSZABADSAG, 20 Aug 82)	1
Energy Management Program in Sixth 5-Year Plan Detailed (Laszlo Kopolyi; SZAKSZERVEZETI SZEMLE, No 4, 1982)	6
Situation, Prospective Development of Gas Supply Examined (Akos Ban; ENERGIAGAZDALKODAS, May 82)	13
Housing Situation, Problems Discussed by Deputy Minister (MAGYAR HIRLAP, various dates)	31

POLAND

Special Currency Exchange Rate Table Published (TRYBUNA LUDU, 6 Sep 82)	41
--	----

YUGOSLAVIA

Contract Organizations of Associated Labor Discussed (Jovan Kozomara; BORBA, 9 Sep 82)	43
---	----

NOTICE

The cover of JPRS 81959 of 12 October 1982, No. 2323 of this series, erroneously read EAST EUROPE REPORT: Political, Sociological and Military Affairs. It should have read EAST EUROPE REPORT: Economic and Industrial Affairs.

HUNGARY

MINISTER ELABORATES ON TOUGH REQUIREMENTS FOR ECONOMIC PERFORMANCE

Budapest NEPSZABADSAG in Hungarian 20 Aug 82 p 5

[Article by Istvan Hetenyi, minister of finance: "Goals and Means"]

[Text] In the middle of summer we can already begin to take account of what the annual performance of our economy will be like, where we made progress, where we met with tight problems, what we must and can adjust as soon as possible.

The fact that public opinion is following these questions with increased interest is not so much a sign of a sudden increase in general economic culture as it is a sign that under present management conditions the enterprises and sometime even the consumers can feel more directly the problems of the country and national economy, the extent to which our performance corresponds or fails to correspond to objective requirements, to those two goals of economic policy, restoring the economic balance and preserving the standard of living attained.

It is already clear to everyone that the December 1978 decisions which gave precedence to these two goals over other economic processes were timely ones. Without the new course of the past 3-4 years, worthy of recognition in many respects, our economy today would be in a deep crisis.

Even so the difficulties are great. While it is an undoubted achievement that our foreign trade situation has improved by an order of magnitude (it has changed from a large deficit to a modest plus), that we have avoided an economic slump, preserved the standard of living and expanded the health and cultural networks, still everyone feels that the performance of our economy has not increased so much that we are armed invulnerably against every problem, the international conditions since 1979 having become more difficult and extraordinarily unfavorable both politically and economically.

The anxieties became more palpable recently when it became necessary to take measures, even during the year, to strengthen the balance and the security of management. This is really a new phenomenon in the history of our planned management and it is understandable that we must better explain the necessity, purpose and character of such measures. It is an old saying that understanding is the basis for acceptance.

The basis for an understanding of economic processes and measures is a realistic evaluation of performance. This is not a simple question. In the first place we all have a great tendency to judge our own performance subjectively, whether we are talking about individuals or enterprises. In the second place the standard for judging performance is a shifting one. We must measure not against yesterday but rather against the requirements of the time. And here one may be surprised to learn that what seemed sufficient yesterday is too little today. This is what happened this year, for example, in connection with foreign trade processes. The planned foreign trade processes are no longer sufficient to ensure an international payments balance, because the high international interest rates increased our expenditures and under present money market conditions the uncertainty of assuming credit has increased. For all these reasons an export increase greater than planned became an unavoidable necessity.

It is not easy to adjust to a shifting standard--but there is no other possibility in a changing world. And it is not easy to adjust distribution to performance in a society in which the state undertakes and carries out a broad scale of material guarantees. This is the strength and advantage of our society, but it also defines that scope within which short term economic policy can move.

Performance orientation is not yet intensive or accepted everywhere. Sometimes our concepts and regulators do not stress this chief principle adequately. For example, an expression widely used is that we are putting our economy on a new growth path. This is quite true, but many take it to mean that we need simply to shift to the new path and all the problems of the economy are solved. But the essence is that we must be able to progress on this new path--a path leading to the goal but a very rough one--and this requires the constant solution of very demanding tasks which, in part, differ in nature from earlier ones. A new path (plans and regulators) is in vain if one only loaf along it, and gets nowhere.

The changes are especially confusing to those who have difficult struggling with the higher requirements. Some feel that the tightening of conditions and regulators is the cause of their worsening financial problems. As a phenomenon this is true. This is a manifestation of the situation declared in 1979, that maintaining present positions is possible only with an increase in performance, and where profit increases less than the average the income that can be distributed there will necessarily decrease.

The frequently used expression, that the government is tightening the conditions for management, is thought provoking. Not denying the practical advantages of this expression, for example its brevity and that it attracts attention, it may be worth analyzing it from the viewpoint of whether we have here a paternal or public rigor or simply consistent behavior.

It is well known that the regulators (the tightening of which is now being discussed) are tools for transmission. They transmit the objective conditions for management on the one hand and the central intent on the other.

Our economic system is characterized by the many-sided role of the state. For this reason the simple implementation of a change in the economic process frequently requires central measures, a change in the regulators. Most examples of this can be found in the area of fixed prices. Changing these is basically a following of market processes--the enterprises judge the tightening or relaxation of them according to their own interests.

It is a further function of the regulators, especially the financial regulators, that they ensure a planned distribution of incomes among the state, the enterprises, the populace and the several groups thereof.

The government is responsible for maintaining these ratios, for the coordination of incomes and their distribution, so it cannot postpone a prevention of or correction of disproportions which develop. There are always greater or smaller deviations from the planned ratios. If the correction of these disproportions is more urgent today than earlier then the reason for this is not that new large scale disproportions have arisen but rather the simple fact that today there are no supplemental resources--external ones frequently available in the past--or reserves with which longer lasting disproportions and the accompanying extra distribution might be bridged over.

So much for the justification of changes in the regulators. Now the most difficult question arises. Which regulators and how to change them? This is a complicated question because every change affects different collectives differently--so this requires a harmonization of economic and political interests.

In the second place, the regulators play not only a passive distribution role; they can actively encourage or should actively encourage an increase in efficiency and in incomes also. They should strengthen interest relationships which aid the development of efficient production and hinder the development of inefficient production, which make the workers interested in increasing profits. The greatest criticism of the regulators is that they do not correspond to these principles or do not correspond to the requirements in the expected way. There is much justice in these criticisms. The source of the difference in opinion is not that the government wants to follow different principles. But the realization of the requirements--with simple mistakes and errors--is possible only amidst objective contradictions. The desired and the possible frequently do not coincide.

The incentive character of the regulators can be realized only if regulation is normative. In plain language this means that the burdens and the chance to produce income should be the same for every managing organization working under the same conditions. One's own prosperity should depend primarily on one's own performance and not on state exceptions or ad hoc good will. This is an indispensable principle and requirement.

A number of state preferences and concessions, which are realized because of the longer range thinking of the state, because of the special difficulty or risk of some task, or because of social reasons, are completely compatible with this requirement--if they can be made use of by every enterprise which meets the previously proposed conditions. In this way we should encourage,

for example, investments which develop export, energy and materials conservation, rural industrialization, and so forth. It is similarly compatible with the incentive effect if the larger income bears not a proportional but rather a greater burden (for example, progressive taxation), if the magnitude of this is rational, thus if it does not impede the swifter development of those working more profitably.

And finally, it follows from normativity that the regulation of enterprises working under substantially different conditions for objective reasons can be different. Thus, for example, industrial regulation can differ from that for agriculture or there could be special regulators within the latter for farms with poor natural conditions, and so forth.

It is another condition of the incentive character that insofar as possible an unambiguous interest center or system should be realized for the managing units. Profitability plays the chief role here, and it is to strengthen this that we intend to put an end to interest which deviates from this in income regulation, to link income regulation better to profit.

Where do we still find contradictions which weaken the incentive character of regulation (including negative incentive also)? Unfortunately there are many such contradictions. These include the complex link between the general and the particular, the whole and the part, the intent and the result. Let us look at a few examples.

How is the principle of some regulation for some conditions realized in practice? Do any two enterprises really have the same conditions? One is in the machine industry, the other in light industry; one produces primarily for export, the other for the domestic market; one is new, the other is old. But their regulation must be common-disregarding possible normative preferences--because they are the same in the requirement that the social capital used there and the manpower employed there should yield ever greater net profit for society. Thus, from the viewpoint of regulation, one can recognize deviating conditions only when looking at the narrowest, most characteristic sphere.

It is necessary to weigh the present and the future where unfavorable profitability is coupled with development promising high income. Here preference may be justified to improve profitability. But what happens in the case of unfulfilled promises? How long can the concessions be renewed?

The contradiction of the whole and the part is, What should be done with low profitability or deficit enterprises? Lasting support of them necessarily limits the sums which could be used to develop efficient enterprises, so dispensing with them or making them profitable is absolutely necessary. But all this must be done so as to be accompanied by bearable burdens, and so there is a great temptation to continue their support for a long time. This can hardly be tolerated--just with regard to the enterprises working well.

The difference between intent and result brings up tasks in the regulation of some processes of special importance. In the past more than one regulator encouraged participation in some process rather than the attaining of some result. But the economy is not an Olympics; what is important here is not participation but results. This must be taken into consideration to an increased degree especially in regulators for research and development.

If we add to all this that every more essential regulation has, directly or indirectly, a social effect also then it is understandable how many questions, in addition to the clarity of goals, arise and have to be harmonized when developing regulators.

Regulation is only one element in the guidance of economic processes. In the longer run and from the strategic viewpoint we must regard as of equal rank with the regulators--indeed more determining--the personal qualities of leadership and leaders and the system of selecting them and providing incentive for them. Their increasing responsibility requires increasing independence and scope for action, which should be supported by putting an end to petty supervisory patronage while increasing the worthy supervisory role of the collective interested in management. Orienting the enterprises toward stronger performance also expands the freedom of movement of enterprise management as a whole. A number of measures have been taken already--and are under way--to realize this. Excessively centralized organizations have been broken up; the marketing-production-development-research chain within the larger enterprises is becoming ever more complex; the earlier fixed profiles have been dissolved; and so forth.

All this, however, can be effective only--and there are great possibilities in this--if the performance orientation within the enterprise, and the internal interest system supporting it, develop to the extent already realized among enterprises.

The economic challenge requires a complex and effective response. The complex process of guidance cannot be narrowed down to regulation; rather there must be a strengthening of omnidirectional social-economic effects which will aid the workers in developing their capabilities at every point better than heretofore for a solution of the lasting and difficult tasks.

8984
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ENERGY MANAGEMENT PROGRAM IN SIXTH 5-YEAR PLAN DETAILED

Budapest SZAKSZERVEZETI SZEMLE in Hungarian No 4, 1982 pp 19-24

[Article by Dr Laszlo Kopolyi, state secretary, Ministry of Industry: "The Energy Management Program in the Sixth 5-Year Plan."]

[Text] I.

In recent years the external and internal conditions of the energy supply for our national economy have changed significantly. Between 1973 and 1980 the world market price of coal increased about four times, that of coke and uranium five times and that of petroleum ten times. The peculiarities of the CEMA price system blunted the abrupt price increase of the capitalist market in trade within CEMA, but with the passage of years the energy price explosion has affected the Hungarian national economy ever more strongly also. In the first years of the Fifth 5-Year Plan the growth rate of our direct energy use exceeded the growth rate of national income.

By 1978 it became clear that if the energy needs of the national economy increased at the earlier rate than--as a result of increasing costs--not only would we have to give up the realization of many other, important economic policy goals but even our accomplishments thus far would be in danger. Thus our further progress and well being depend on the extent to which we can conserve energy.

The most important economic policy task of the Hungarian economy is to improve the external and internal economic balance. It was first of all the sudden increase in energy prices which caused the breakdown of the balance. The tolerance of the economy reached an end in 1978; the years since then have resulted in positive changes. The changes can be attributed to the fact that the government ordered execution of an energy management program coordinated with the medium range plan of the Sixth 5-Year Plan, applicable to every sphere of management. The goal of the program is to develop the processes begun in 1979-1980--resulting in a decrease in the intensity of the energy requirement--thus laying the foundation for the possibility that the rate of growth in fuel and energy use will moderate during the Sixth 5-Year Plan.

In addition, however, we must increase the use of energy sources of domestic origin, primarily coal and nuclear power. Thus, the program has as a goal not only a quantitative moderation of energy consumption but also a change in the composition of energy sources.

According to the prescriptions of the program fuel use in the Sixth 5-Year Plan can increase overall by at most 10 percent. It is a fundamental condition for reaching the goal that, with the prescribed economic development and increase in the standard of living, the development of the production structure be less energy-demanding than before.

Thus, in the course of the Sixth 5-Year Plan, one of the central questions of economic activity became energy conservation, which requires the development of a new attitude and the practical realization of new management and development principles in every area of the economy. The energy management program contains the details for realization within the framework of an action and audit program. The various chapters of the action program contain concretely those energy management tasks which must be executed between 1981 and 1985 in the areas of energy production, transformation and use--going beyond the tasks stressed in the Sixth 5-Year Plan. The several chapters group according to theme the programmable recommendations worked out by ministries, organs with national authority and councils.

II.

It is worth while to examine from the viewpoint of energy management a few branches of industry, primarily those where the greatest energy use takes place.

Ferrous metallurgy--as is well known--is an energy demanding branch of industry, and the great majority of the fuel used here comes from import. Thus the order of magnitude of savings which could be attained here is outstanding. The first priority task is making use of some of the heat loss occurring; the next sphere of tasks is the introduction of new technologies, building oxygen converters, introducing continuous casting and oxygen enrichment technology--all aimed at reducing use of the most expensive type of fuel, coke. With these rationalization or technological measures we could save 200,000 tons of coke per year.

There are possibilities for rational utilization of lost heat arising in the calcinating rolling drum furnaces in aluminum metallurgy. On a national scale this will make possible a saving of about 12,000 tons of fuel oil. In Hungary 15-16 MWH of electric power are used to produce one ton of semi-aluminum. This could be moderated with use of modern furnaces.

From the viewpoint of our daily or further tasks we should mention the problem of using burnable gases arising in the course of petroleum processing. The magnitude of the loss is significant, equal in value to 25,000 tons of fuel oil per year.

From the viewpoint of energy use the construction materials industry takes second place in the ranking of industrial branches. Cement and lime manufacture, manufacture of walling material and the glass industry are especially significant within this. In all three areas there are possibilities for decreasing energy specifics and rationalizing the choice of fuels. The biggest problem in cement and lime production is how to switch to solid fuels in the modern cement factories designed originally for hydrocarbons (in Beremend, Hejocsaba and Belapatfalu). The reason is that the brown coals mined in Hungary, with low calorific value, can be used in cement technology only after further processing, which requires significant investment. The countries

more developed in the cement industry use a technology which makes possible the burning of rubber waste in the main fire. Considering that the large quantity of rubber waste arising here is not used, and that storing it and destroying it causes problems, a technological conversion would be worthwhile. The energy management program has this as a goal also.

Coal fired brick manufacturing experiments have begun already in a number of brick factories in the country, to replace with brown coal and the oil needs of brick firing furnaces fueled with oil.

Measures have been initiated to provide energy conserving building materials and structures. Thus, in the case of walling materials, the quantity of modern Poroton, Thermoton, Uniform, etc. and gas concrete walling materials, in addition to traditional materials, will increase to a significant degree with investments expanding manufacturing capacity.

In regard to insulating materials, the currently manufactured quantity of mineral batting will double with realization of the "Tapolca III" investment and investment in a new glass batting factory is now being prepared. The manufacturing capacity for expanded perlite satisfies the needs.

The variety of window materials with reduced heat transmission is expanding. In addition to new buildings, an important role will be played in the period ahead by renovating existing dwellings, increasing thermal protection. A decision has been made to provide incentive making the populace interested in increased insulation and private construction.

Transportation accounts for about 14 percent of the energy use of the economy. Its demand is definitive in use of petroleum products. Modernizing transportation technology and techniques, better organization of shipments, an appropriate division of labor and making full use of vehicles can ensure efficient energy use. Railway modernization is continuing on the basis of the goals; between 1981 and 1985 we will electrify an additional 200 kilometers of line. Completely eliminating steam traction will make it possible to save good quality domestic and import coal, which can be used in other areas, for example to replace fuel oil.

In highway transportation the important tasks are keeping up the technical condition of vehicles, ending empty runs, tightening the norm systems and strengthening documentation discipline. All this will be aided by data recording equipment, installing tachographs which provide performance data reflecting the real movement of vehicles. What additional savings we can record in the period ahead will depend on the training of and material incentive for experts working in highway transportation.

The results achieved in the area of agriculture are noteworthy in regard to modernization of energotechnology. The simplest way to make use of agricultural and forestry waste and by-products is to burn them.

Calculations thus far indicate that this would yield fuel equivalent to about 300,000 tons of oil. The initial good experiences show that by burning straw, for example, we could save 100,000 tons of oil per year.

Use of trimmings and cut out wood from fruit and grape production could expand resources with a heat equivalent to 60,000 tons of oil per year; use of forestry and cutting area waste and primary lumber industry wastes would yield the equivalent of 40,000 tons of oil per year.

It must be emphasized that careful economic calculations are needed to determine what expense is involved in collecting the products listed above and preparing them for burning and in acquiring and operating the boilers. Local initiatives and experiences will determine which of these ideas will be realized. Preliminary calculations indicate that it would be worth while to save this "raw material", now being wasted, by increasing the level of organization and creating leader interest.

III.

The Sixth 5-Year Plan has prescribed 30 billion forints for realization of the developmental tasks of the energy management program; within this we calculate an expenditure of 15 billion forints for realization of the action program. Implementation of the program in the sphere of the populace may be aided primarily by means of price policy and regulation. The level and ratios of producer and consumer prices for fuels will be developed in such a way--in harmony with the living standard policy and price policy of the Sixth 5-Year Plan--as to encourage primarily conservation of hydrocarbons and coke, thus directly reducing dollar accounting imports. If need be, where national economic interests require it, there may be use of authoritative functions also. For a significant number of the proposals figuring in the action program we estimated both the savings and the investment funds. Many hundreds of proposals in various areas were prepared as a basis for the program. Additional proposals are being worked out. Thus, in the interest of selecting the most efficient solutions, every single theme must be judged finally on the basis of individual technical-economic evaluations. Taking economicalness and efficiency into consideration, it will be necessary to establish a sequence for realization. So the program is not a mass of measures to be implemented mechanically. We are constantly reviewing the execution and timeliness of the individual program points. Some program points may be modified depending on changing circumstances or, if they lose their timeliness, they may be taken off the agenda and new goals may be built into the program. The Economic Committee guides and supervises this work, ensuring with its resolutions the timeliness of the energy management program from moment to moment, which means that we should regard the program as open. It should be understood that we regularly review, in relationship to the systematically changing conditions of the economy, the expenditures and the energy savings to be expected as a result of them; and if the financing of another possibility will give a more favorable result, as compared to some original task of the program, we will realize it.

It must be recognized that the sum which can be turned to modernization of energy management in the given plan period is finite. The government has prescribed--out of the previously mentioned sum--use of 15 billion forints to achieve the goal formulated in the action program. This sum is five times the sum used in the course of the Fifth 5-Year Plan. It is obvious that we must finance out of these moneys the realization of those possibilities which are most economical.

A rational modification and regrouping of tasks, that is adjusting the program to the situation moment by moment, will remain the basic principle to be followed in the future also.

Every task in the program has someone responsible for it and has a time limit for execution, but in addition the active cooperation of every institution, enterprise, managing unit and guiding organization is needed in implementation of the energy management program. The ministries and chief authorities designated as responsible took action at the beginning of 1981 to carry out tasks prescribing organizational measures not requiring investment.

Our economic conditions have worsened further recently. This made it necessary to accelerate realization of the original goals of the program. The Economic Committee took action on this at the end of last year. It can be evaluated as a favorable phenomenon that the megye councils have prescribed and initiated execution not only of those tasks prescribed for them by the action program but also plan other tasks which can be carried out in their areas.

It can also be evaluated as a significant and favorable modification of direction that the megyes are aiding--at the level of regional programs--execution of tasks falling in the branch sphere of responsibility. The socialist brigades and innovators can play an especially important and valuable part in this work. Useful pledges and goals in the labor competition and various movements must be in harmony with the energy management program. The social organs can aid the coordinating work of the megye coucils, can participate in the creation of work groups and in working out competitions, especially in those areas where professional technical staffs are not available. Social criticism of and aid to energy conservation work in a given area is an important task for them.

The MTESZ [Federation of Technical and Scientific Associations] has created a presidium committee to aid the action program. It is the task of the scientific associations to acquaint the broadest possible circles with the program and to support the program with social tools and to discover new energy management and conservation possibilities both within the tasks defined in the program and outside of them also. They also have the important task of discovering circumstances hindering or impending execution of the program and preparing recommendations for their resolution.

IV.

Energy use by the national economy in 1981 was about 1,252 PJ, which is 0.7 percent less than the 1980 energy need. But, while total energy consumption

decreased, electric power use increased by 3.2 percent. The moderation in actual energy consumption as compared to the 1981 plan prescription (33 PJ) is the result of the combined effect of a number of factors. For example:

- the 1981 energy consumption was realized with a growth of the economy smaller than planned;
- use of energy-demanding products on the domestic markets decreased and marketing possibilities on external markets became less favorable. Because of this production (manufacture of crude iron, production of rolled goods, the construction materials industry) decreased as compared to what was planned in a number of energy-demanding branches; the production structure changed;
- energy rationalization, conservation and price measures had an effect; and
- the average temperature of the 1981 heating season deviated from the 1980 value and from the 100 year average temperature (a warmer winter).

Looking at the numeric effect of these consumption moderating factors it can be established that the 33 PJ energy savings of the year, as compared to the plan, contains about 22 PJ for the year as a result of a smaller than planned economic growth, a modification of structural composition and weather factors while the remaining 11 PJ reduction in consumption for the year was the result of implementation of the energy management program.

The distribution of energy use by economic branch last year, as compared to 1980, shows that energy consumption by industry decreased by about 1.5 percent despite the fact that production exceeded the 1980 level by 2.2 percent. Energy consumption by the other material branches (construction industry, agriculture, transportation) also decreased, while energy use by the populace and the communal sector increased moderately.

The decrease in energy needs, as compared to 1980, took place primarily in a moderation of use of fluid hydrocarbons (gasoline, fuel oil, heating oil). The ratio of fluid hydrocarbons in the structural composition of fuels decreased from 36.5 percent in 1980 to 34.9 percent.

Energy supply for the economy was balanced in 1981. Energy consumption at the annual level remained below the 1980 level--as a result of the factors already mentioned and as a result of 1981 execution of the government energy management program. This made it possible to satisfy the energy needs of users with petroleum imports and petroleum processing lower than in 1980, so there was no need to buy the dollar accounting petroleum products prescribed in the national economic plan.

Information pertaining to fuel import possibilities made it necessary to review the energy supply situation for the Sixth 5-Year Plan. Further measures became necessary on the basis of the results of the study--increased exploitation of economical domestic energy production possibilities and acceleration of realization of the goals contained in the energy conservation program. Within this framework we must strive to broaden methods resulting in savings and to use solutions replacing more expensive fuels with cheaper fuels. In the interest of realizing these goals the Economic Committee passed resolutions in October and November 1981 which provide a direction for stressed tasks in 1982 also.

The 1982 annual economic plan prescribes that energy consumption should remain at the 1981 level. Use of petroleum and petroleum products must decrease further in 1982 by increasing domestic coal and natural gas production and by putting the Paks Nuclear Power Plant into operation.

In the interest of realizing the energy use prescribed in the 1982 annual economic plan it must be ensured that the numerical values for energy conservation planned for 1982 should be realizable with the organizational measures and investments aimed at energy conservation listed in the energy management program of the Sixth 5-Year Plan.

Carrying out these tasks requires the organized and active support of the entire society. In the interest of aiding thrifty management and moderating energy use the support of social organs is indispensable in forming the awareness of energy users and the active organizing and mobilizing cooperation of the trade unions is especially important.

8984
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SITUATION, PROSPECTIVE DEVELOPMENT OF GAS SUPPLY EXAMINED

Budapest ENERGIAGAZDALKODAS in Hungarian No 5, May 82 pp 185-193

[Article by Dr Akos Ban, candidate in technological science, of the Hungarian Hydrocarbon Industry Research and Development Institute: "The Situation and Prospective Development of Hungary's Gas Supply"]

[Text] The use of gas as a source of energy has been closely connected also with capitalist industrial development in Hungary.

In our large industrial cities gas factories have operated since the middle of the last century: In Budapest since 1856, in Szeged and Debrecen since 1864, and in Gyor since 1869. By the end of the century and until very recently there was a gas factory and pipelines for gas supply in nine cities outside Budapest.

A change in this development occurred with the discovery in 1937 of the Southern Zala oil fields, which were brought into production at the same time as utilization of gas associated with oil and recompression into the stratum began. At that time gasoline installations were built at Budafa and Lovasz, which provided propane and butane to the population to power automobiles. We consider as a major technological development the delivery of oil and natural gas alternately in 1949 through the long-distance Budafa-Budapest oil pipeline by means of stoppers. Delivery to Budapest of gas produced in the coke-plant of the Danube Ironworks began in 1962.

The placing into production of the natural-gas fields discovered in the Alföld region during the 1960's was of critical significance for the development of the entire Hungarian gas industry. As a result of this delivery of Alföld natural gas to Budapest began at the end of 1953.

The natural gas reserves were the basis of supplying the nation's large cities, other towns, and industry with an energy source based on gas. The production of town gas from natural gas was begun, and in parallel with this the transition from town gas to natural gas as well as the connection of new cities, towns, and plants to the gas service. It is not an exaggeration for us to say that the availability of an energy source based on gas influenced not only the standard of living of the population but also the industrial development of our cities and rural areas as well. As an example it can be mentioned that within a couple of years after the transition from town gas to natural gas there was a ten-fold

increase in consumption in some cities. In the capital city, where many circumstances made the transition to natural gas difficult, there has been six-fold increase in the amount of gas delivered by the Capital City Gas Works compared to before 1956, and it now amounts to 3 billion cubic meters, to which should be added the consumption of industrial plants supplied by direct long-distance pipelines. Especially noticeable in Budapest has been a favorable change in the cleanliness of the air as a result of the transition to natural gas.

The transition to natural gas in industry, similar to the experiences of other countries, decreased specific investment and operation expenses of the various branches of industry, contributed to the production of quality goods, reduced the consumption of energy, promoted the regulation of technology and heating in certain areas, such as the chemical industry, the fertilizer industry, petrochemistry, and was the basis for a dramatic development.

Development in the chemical industry required a pure natural-gas substance, and for this reason we have imported 200 million cubic meters annually from Romania under an international agreement. Import has been further expanded since 1975 from the Soviet Union, and presently, as the result of the construction of the Orenburg pipeline, 3.8 million cubic meters [annually] of Soviet import are helping to supply domestic demands for gas (Figure 1).

On the basis of a measurement of all potential users, the present total consumption of 10 billion cubic meters can be compared with a desirable consumption of 15 billion cubic meters in the future.

In our country the use of propane and butane has an important history; its beginning coincides with the placing into production of the South Zala oil fields in 1939. Presently the number of users of "PB" [propane-butane] is 2.2 million, which will increase further. We are planning an increase in the quantity of PB as well, along with the areal expansion.

During recent periods the expansion and development of gas service has required the manufacture of modern heating systems and devices as well. The technical level of long-distance supply and distribution has risen, and underground storage of natural gas has also been achieved. All this serves toward a more secure energy supply for the population, communities, and industry.

With the measures prescribed in the Sixth Five-Year Plan and with the realization of the energy-management program, the portion of hydrocarbons in domestic energy consumption must be reduced from 64 percent to 59 percent, and as part of this the oil portion [must be reduced] by at least 4 percent.

Most of the increase in the requirements for energy are to be covered by energy produced in atomic plants or imported electricity.

The consumption of hydrocarbon energy sources through 1985 cannot exceed the level of 1980, according to the plan adopted.

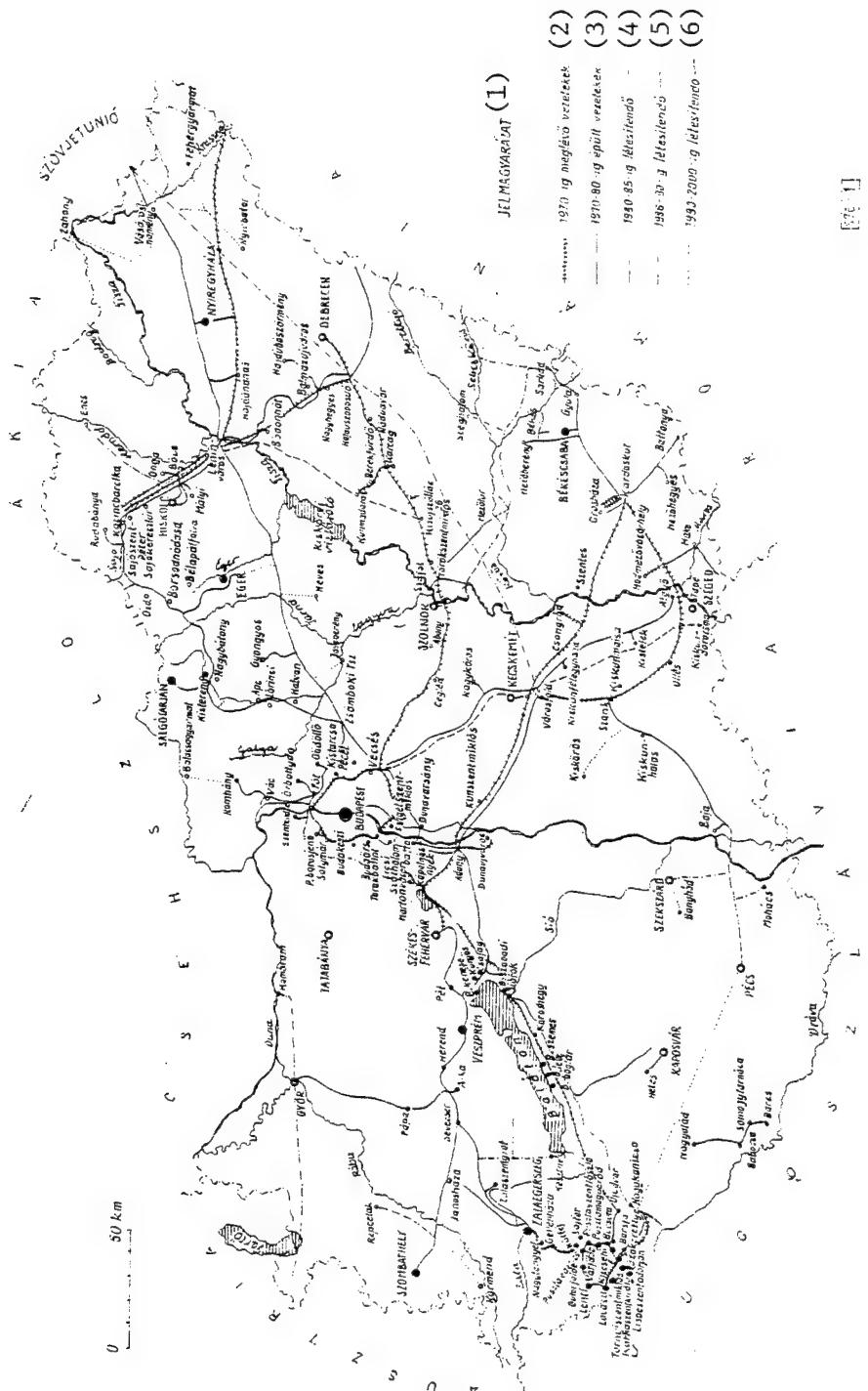


Figure 1. The Development of the National Natural-Gas Pipeline System

Key: (1) Explanation of symbols

- (1) Explanation of symbols
 - (2) Pipelines existing by 1970
 - (3) Pipelines constructed between 1970 and 1980
 - (4) Pipelines to be established between 1980 and 1985
 - (5) Pipelines to be established between 1986 and 1990
 - (6) Pipelines to be established between 1990 and 2000

By the end of the millenium, we must make a change to energy sources that are cheaper than oil. According to the long-range energy policy approved in 1978:

--the use of oil will be replaced by [the use of] natural gas and coal, and at the same time the great efforts will be made in every area of national economy to achieve the savings that are possible through energy management.

--atomic and coal energy will move forward in the energy structure.

Natural-gas Exploration and Production

About 85 percent of the area of Hungary is suitable for natural-gas exploration, and as the result of previous explorations our natural gas reserves are 126 billion cubic meters. Of this, 94 billion cubic meters contain more than 70 percent combustible matter, 14 billion cubic meters between 60 and 70 percent, and 18 billion cubic meters below 30 percent. It is significant that more than 10 billion cubic meters of our reserves are pure carbon dioxide, and some of this is sold for food purposes in the form of carbonated water and dry ice. About half of the combustible natural-gas reserves is "cap gas" or associated gas dependent on oil, which requires special technical measures for production. Exploration is continuing intensively, and the strata between 2,000 and 3,000 meters deep are especially promising, where because of high temperatures and pressures, taking into account the existence of conditions for production and accumulation, further reserves rich in heavier hydrocarbons can be supposed to exist.

Natural gas is being produced in several areas from about 100 wells. Gas production by absorptive washing, expansion, or mechanical cooling guarantees a dew point of 10°C. For this reason there have been no problems with condensation in the pipelines. The natural-gas fractions heavier than propane, butane, and pentane are separated out. In the largest gas plant, Algyo, iso-butane is also extracted, and they are planning to extract ethane, which as a result of greater cooling will result in a greater production of existing propane. Since propane and butane will be extracted in the natural-gas fields and oil refineries, it will be advisable in the future to plan separate distribution to the population of propane in small containers, while the butane can be used to fuel automobiles in cold weather. The ethane will be delivered to the Tisza Chemical Combine where it will make possible the production of benzine for the chemical industry.

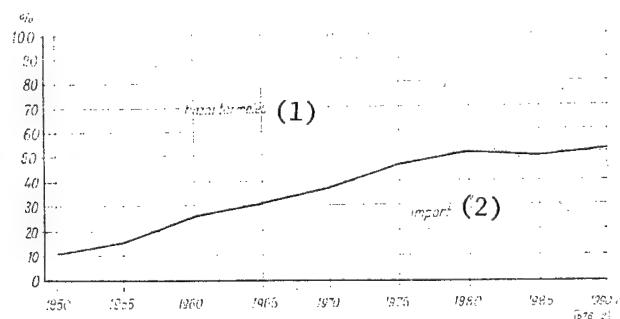


Figure 2. Energy and Fuel Balance in Hungary

Key: (1) Domestic production

(2) Imports

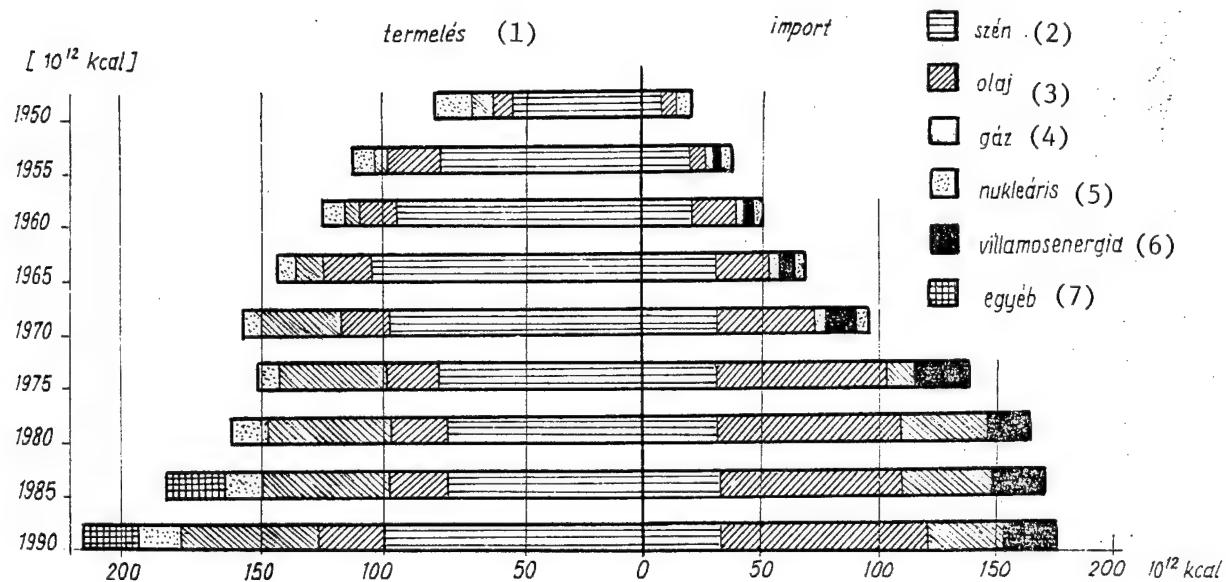


Figure 3. Energy and Fuel Balance

Key:

- (1) production
- (2) coal
- (3) oil

- (4) gas
- (5) nuclear
- (6) electric energy
- (7) other

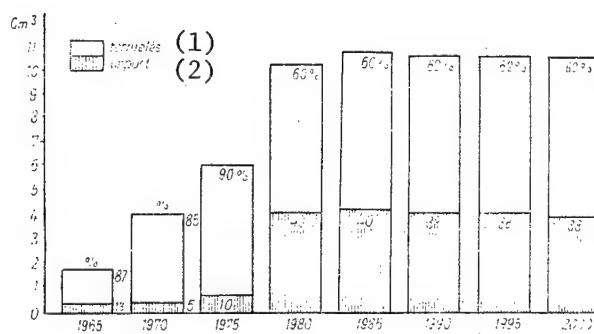


Figure 4. Natural-gas Balance Between 1965 and 2000

Key: (1) production

(2) imports

Table 1. Energy Balance (data rounded)

		Unit of measurement: PJ [quadrillion joules]							
Name		1950	1955	1960	1969	1970	1975	1980	1985
Total sources		322	515	620	812	963	1,114	1,306	1,428-1,470
of this: production		285	435	456	561	607	594	624	716
of this: coal		213	318	373	419	381	306	289	301
oil		21	67	50	75	79	84	88	84
natural gas		13	17	8	42	126	180	209	213
other (including PB)		38	33	25	25	21	25	38	42
nuclear		--	--	--	--	--	--	--	75
import		37	79	163	251	356	519	682	712-
of this: coal (incl. HALDEX)		8	21	38	75	59	50	46	42
[expansion unknown])		--	--	8	8	8	13	8	13
charcoal		17	33	29	33	33	38	38	38
coke		4	13	67	100	197	343	377	377-
oil		--	--	8	8	8	25	134	406
natural gas		--	4	8	21	46	50	79	134-
electric energy		--	8	4	4	4	--	--	146
other		314	490	500	766	900	1,076	1,264	1,361-1,404
Total usage									
Production/import ratio (3)									
production		80	85	74	69	63	53	48	50-
import		12	12	26	31	37	47	52	51
Energy structure (3)									
coal excess		74	72	72	66	50	37	29	28-
oil		8	16	19	22	29	38	36	32-
gas		4	3	3	6	14	18	26	25
fusion material		--	1	1	2	5	5	6	8-
other		14	8	5	4	2	2	9	3-

There is corrosion in the process of production, since Hungarian natural gas contains no hydrogen sulphide, only in places where free water arises and can condense out of the gas stream.

In the case of carbon-dioxide gases, internal corrosion is not frequent either, because the heavier hydrocarbon fractions contain an inhibiting substance. Appropriate inhibitors are added continually in places where corrosion is observed, especially in the interest of protecting steel drilling and production pipes.

Long-distance Delivery and Distribution

Transportation through pipelines of natural gas beyond Zala megye began in 1949 through the oil pipeline connecting Budafa and Budapest, alternately moving oil and gas with stoppers. The most frequent shipment was 5 gas stoppers per week; in order to prevent mixing, the starting pressure of the oil and gas had to be kept at 70 bars, and at the receiving end a pressure of more than 25 bars had to be maintained. A little mixing of oil and gas did occur, however, so care had to be taken at the receiving point to separate the separation of oil and gas. In this manner 1 million cubic meters per week of natural gas were transported to Budapest.

In order to improve Budapest's gas supply, a circular pipeline was built (Figure 5).

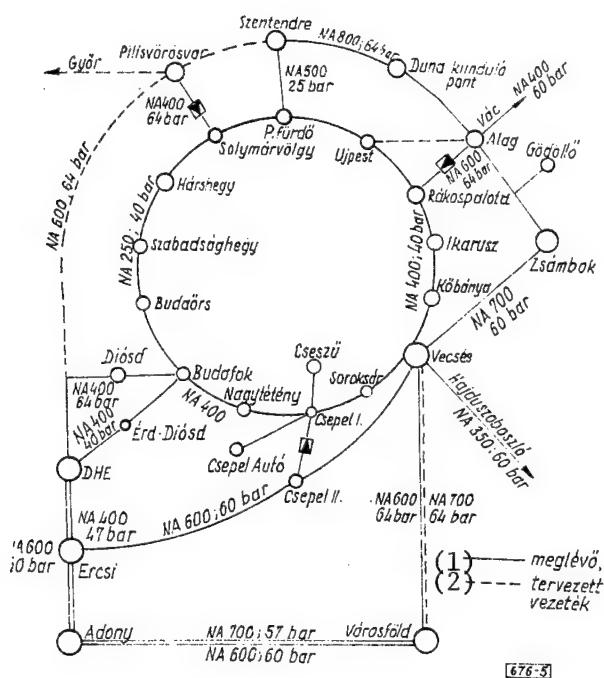


Figure 5. The Budapest Circular Pipeline

Key: (1) existing (2) planned pipeline
[all other words are names of places]

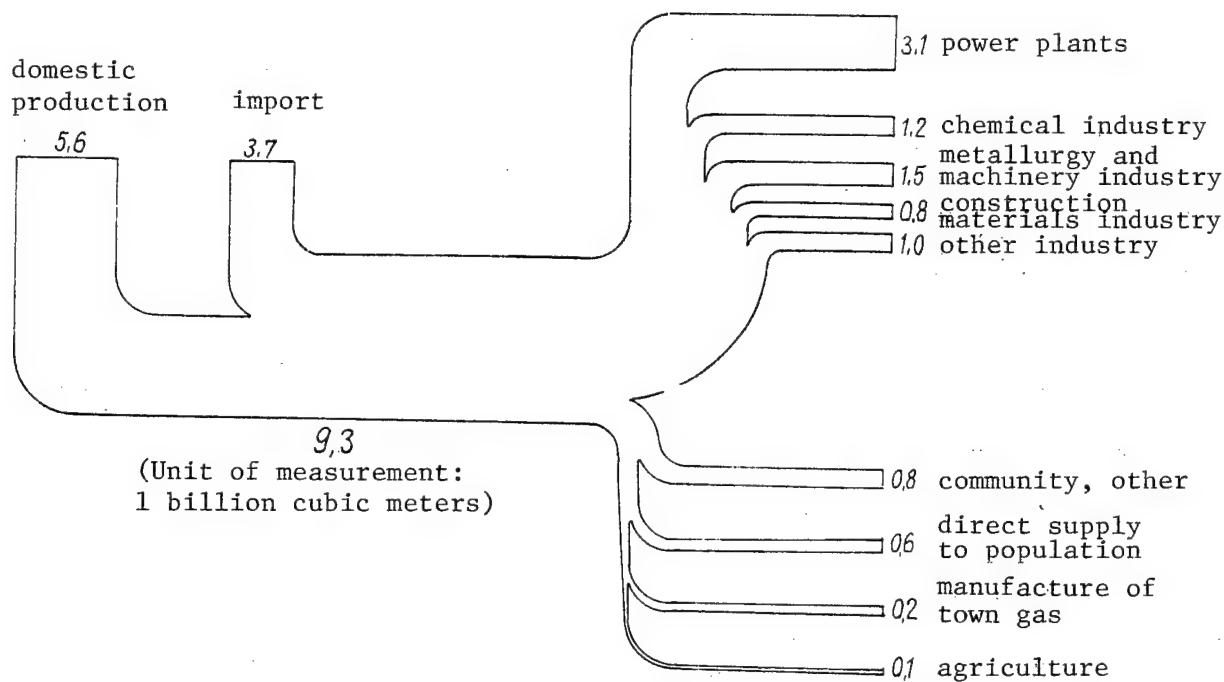


Figure 6. Integrated Natural-gas Industry
(unit of measurement: 1 billion)

At present 10 billion cubic meters of natural gas are circulating through a gas network of 3,321 kilometers. Consumption according to homogeneous groups of users can be seen in the attachment and the figures (Figure 6). At 120 locations 133 gas-transmission stations, long-distance "zero-points" or junctions, are in operation.

The goal for the next period is to increase gas service to the countryside by nearly 1 billion cubic meters over the next 20 years, and with this to partly replace heating oil and connect new household and community users. The Capital City Gas Works will increase their gas traffic by almost 1 billion cubic meters. Consumption by power stations is a function of the availability of coal and nuclear energy.

The number of household consumers with pipelines increased in the countryside from 525,000 to 919,000 in 10 years; the length of the distribution network in the countryside increased from 3,780 to 5,800 kilometers, and in the capital city it rose to 2,800 kilometers.

Among the characteristic indicators of the size of the area of consumption can be mentioned the fact that in the decade between 1970 and 1980 expansion of the circle of consumption underwent a dramatic increase, and the town-gas service that in 1970 went to 10 cities and 10 towns had decreased by the end of 1980 to just 2 cities (Figure 7). In 1970 there were natural-gas pipelines to 26 cities and 68 towns.

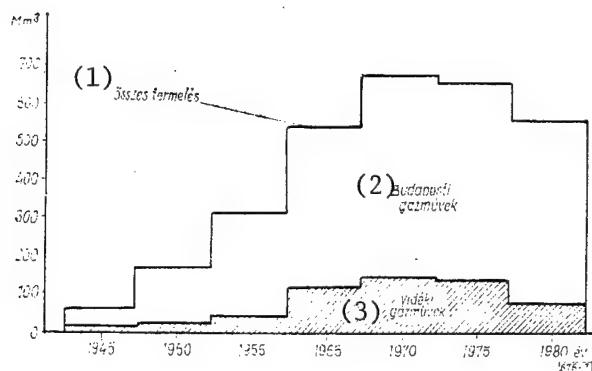


Figure 7. Production of Town Gas Between 1945 and 1980

Key: (1) total production (3) countryside gas works
(2) Budapest gas works

The national system has been built in an interconnected manner (Figure 1). The long-distance pipeline system is connected with the Romanian, Czechoslovakian, Soviet, and Yugoslavian long-distance gas-pipelines.

Transit shipments from the Soviet Union to Yugoslavia take place through our long-distance system. The amount of gas transported will be 2.5 billion cubic meters per year by 1985. In the first stage, a gas exchange actually occurs. Soviet gas arrives into the Hungarian system and the amount to be transited to Yugoslavia can be provided from the Algyo field in the southern area of our country.

In recent years, in connection with transit, we have also undertaken to rent gas storage facilities to Yugoslavia.

Surveillance of the long-distance network has provided for reliable gas service. Except for a few breaks in pipes, there has been no serious failures during the past 20 years.

During the period of the Sixth Five-Year Plan, the long-distance network will expand by about 230 kilometers, another 120,000 to 130,000 residences will be connected for pipe delivery of gas. Thus by 1985 there will be gas supply by pipe to between 1.02 to 1.04 million of the nation's 3.85 million residences, or 27 percent.

Table 2.

Natural Gas Balance (net dry)

Unit of measurement: 1-million cubic meters
2-PJ

Type	1970						1985						1990						19935						
	actual	actual	plan	main variant	variant																				
	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	
Sources																									
Net domestic dry production	3,575	123.3	6,133	211.6	6,500	126.4	6,500	216.4	6,500	216.4	6,500	216.4	6,500	216.4	6,500	216.4	6,500	216.4	6,500	216.4	6,500	216.4	6,500	216.4	
Import + domestic production	200	6.9	4,000	138.0	4,198	139.8	4,005	133.4	4,520	150.5	4,005	133.4	4,970	165.6	3,935	131.0	5,400	179.8							
Total sources	3,775	130.2	10,133	349.6	10,698	356.2	10,505	349.8	11,020	366.9	10,505	349.8	11,470	382.0	10,435	347.4	11,900	396.2							
Distribution																									
Chemical industry	575	19.8	1,277	44.1	1,200	40.0	1,200	40.0	1,200	40.0	1,200	40.0	1,200	41.6	1,250	41.6	1,350	45.0	1,350	45.0	1,350	45.0	1,350	45.0	
Heavy industry	1,147	39.6	1,336	46.1	1,350	45.0	1,300	43.3	1,300	43.3	1,070	35.7	1,270	42.4	800	26.6	1,000	33.3							
FOGAZ [Capital City Gas Works] (without NMMT [expansion unknown])	405	14.0	1,364	47.0	1,590	52.9	1,590	52.9	1,590	52.9	1,700	56.6	1,960	65.3	1,800	59.9	2,260	75.2							
Enterprises with gas services (without NMMT)	481	16.6	2,149	74.1	2,855	95.0	2,860	95.2	2,860	95.2	2,970	98.9	3,410	113.5	3,070	102.2	3,760	125.2							
Own use of OKGT [National Oil and Gas Industry Trust]	115	4.0	272	9.4	385	12.8	375	12.5	390	13.0	415	13.8	480	16.0	415	13.8	530	17.6							
Losses in production, distribution or transportation	168	5.8	255	8.8	135	4.5	100	3.3	100	3.3	100	3.3	100	3.3	100	3.3	100	3.3	100	3.3	100	3.3	100	3.3	
Increase in inventory	--	--	373	12.9	57	1.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
NMMT	884	30.4	3,107	107.2	3,240	107.9	3,800	102.6	3,580	119.2	3,000	99.9	3,000	99.9	2,900	96.6	2,900	96.6							
Total distribution	3,775	130.2	10,133	349.6	10,698	356.2	10,505	349.8	11,020	366.9	10,505	349.8	11,470	382.0	10,435	347.4	11,900	396.2							

Note: Import and transit difference are to be understood at 15°C, which at 20°C corresponds to:

import of 4.2 billion cubic meters and transit difference of about 70 million cubic meters in 1985

import of 4 to 4.5 billion cubic meters and transit difference of about 70 million cubic meters in 1990

import of 4 to 5 billion cubic meters and transit difference of about 70 million cubic meters in 1995

import of 4 to 5 billion cubic meters in 2000; there will be no Yugoslavian gas transit as the 20-year arrangement will expire in 1999.

Table 3. Hourly Peak Figures at Junctions

Type	Unit of measurement: thousand cubic meters per/hr				
	1980	1985	1990	1995	2000
From known and prospective fields	726	771	769	773	782
From underground gas-storage tanks	280	558	558	810	1,038
From import	365	383	365- 413	383- 454	359- 483
From transit	76	285	285	285	--
Total for the national high-pressure pipeline transportation system:	1,447	1,997	2,007-2,055	2,241-2,322	2,179-2,313
Regional system:	47	48	30	20	20
National total:	1,494	2,037	2,037- 285	2,271-2,342	2,199-2,333

Management of Natural-gas Output and Underground Storage

The peak requirements that occur within the period of a day in the capital city and the countryside were at first met by gas tanks, and after the construction of the long-distance network by the flexible contents of the network, which can be estimated at some 20 percent of daily volume.

At the end of the long-distance network supply problems began to appear with the depletion of the Southern Zala fields, and for this reason underground gas tanks have been established since 1962 in depleted natural-gas deposits (Figure 1).

Today the largest underground tank is that in Hajduszoboszlo, which can handle the natural-gas volumes produced from a field with several deposits.

In contrast with the daily sources [of gas] in 1980, within 20 years we must guarantee an increase of 12-16 million cubic meters per day, of which 10 million cubic meters per day will go to underground storage, and 6 million cubic meters per day of this will be realized by 1985 (Table 4 and Figure 8). A major role in satisfying seasonal demands has been played by the construction in the highest-producing Algyo field of a "peak plant" with a capacity of 4 million cubic meters per day in addition to the [existing] gas-handling and production capacity of 8 million cubic meters per day.

The additional amount needed from underground gas tanks and peak plants for seasonal heating is determined on the basis of the difference from the monthly average temperature (+16°C) and the nature of the consumption (Figure 9).

Table 4. Technical Characteristics of Underground Gas-Storage Tanks

Type	1980	1985	1990	2000
1. Hajduszoboslo gas-storage				
--"pillow gas" stored (million cubic meters)	1,708	1,708	1,708	1,708
--"mobile gas" stored (million cubic meters)	400	750	750	1,500
--number of wells	35	35	35	35
--pressurization capacity (thousand cubic meters per hour)				
--output capacity (thousand cubic meters per hour)	110	200	200	300
--output capacity (million cubic meters per day)	210	450	450	900
	10.504	10.8	10.8	21.4
2. Pusztaderics gas-storage				
--"gas pockets" stored (million cubic meters)	248	248	455	455
--"mobile gas" stored (million cubic meters)	100	100	165	165
--number of wells	16	16	17	17
--pressurization capacity (thousand cubic meters per hour)				
--output capacity (thousand cubic meters per hour)	40	40	50	50
--output capacity (million cubic meters per day)	30	50	80	80
	0.73	1.0	1.9	1.9
3.				
--"gas pockets" stored (million cubic meters)	261	261	261	261
--"mobile gas" stored (million cubic meters)	150	180	180	180
--number of wells	7	8	8	8
--pressurization capacity (thousand cubic meters per hour)				
--output capacity (thousand cubic meters per hour)	33	40	40	40
--output capacity (million cubic meters per day)	40	58	58	58
	0.96	1.4	1.4	1.4
4.				
--"gas pockets" stored (million cubic meters)	2,217	2,217	2,424	2,424
--"mobile gas" stored (million cubic meters)	650	1,030	1,095	1,845
--number of wells	58	59	60	75
--pressurization capacity (thousand cubic meters per hour)				
--output capacity (thousand cubic meters per hour)	183	280	290	390
--output capacity (million cubic meters per day)	280	558	558	1,038
	0.612	1.34	1.34	24.9

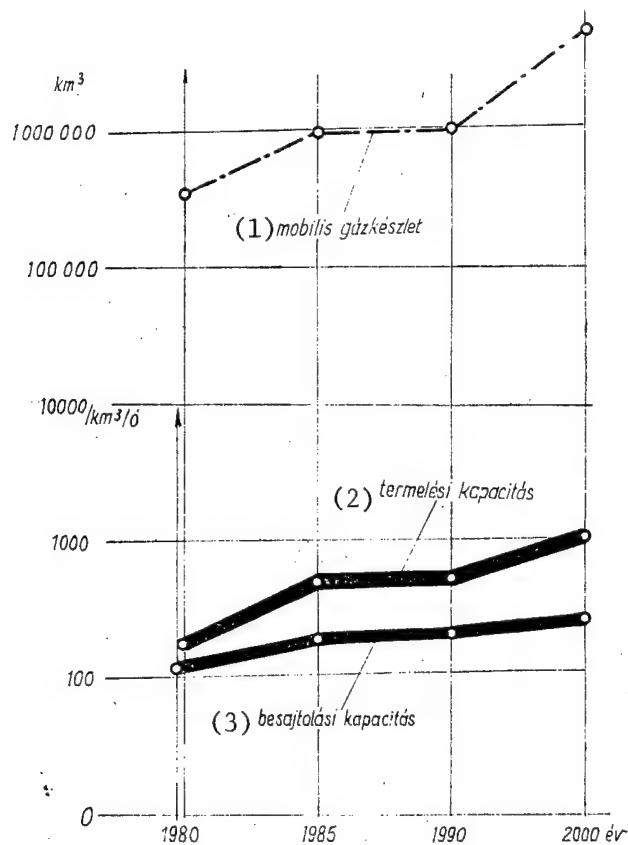


Figure 8. Technical Characteristics of Underground Gas Storage

Key:

- (1) mobile gas
- (2) production capacity
- (3) pressurization capacity

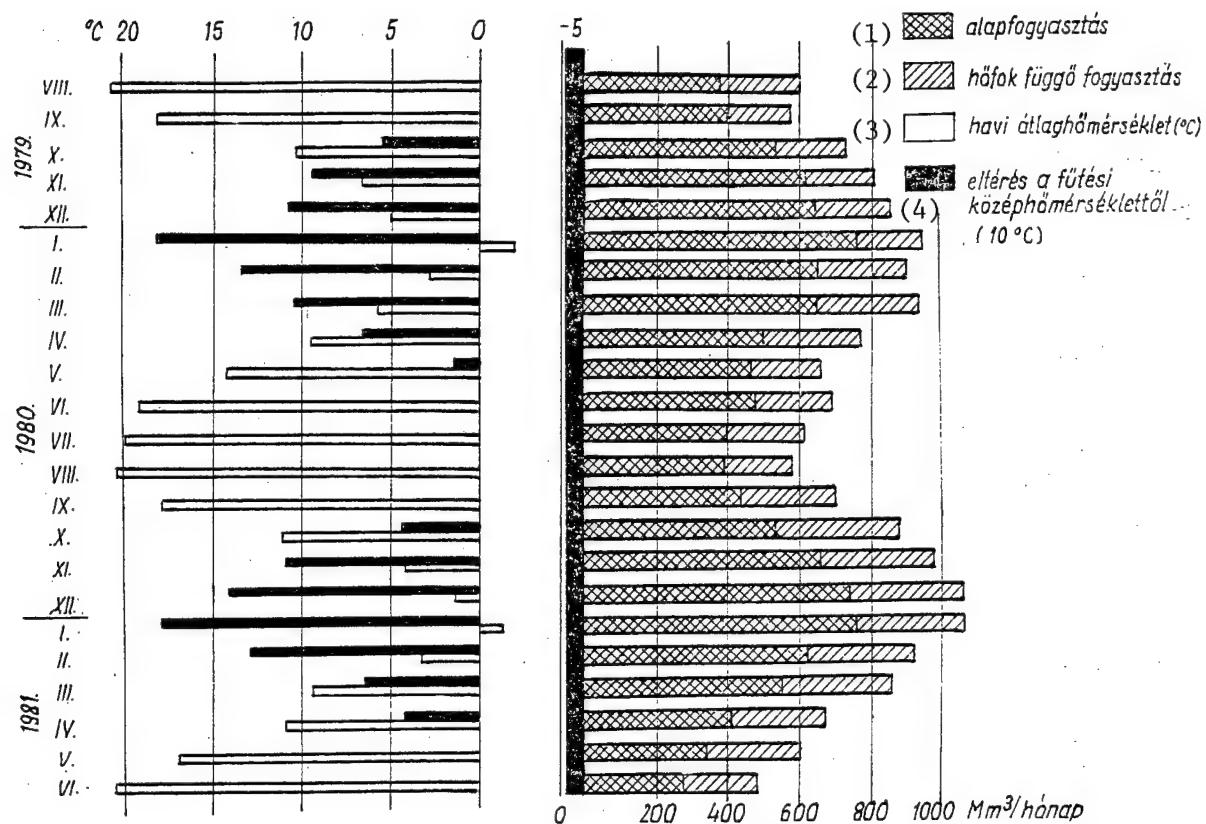


Figure 9. Monthly Average Temperatures and Gas Consumption

Key: (1) basic consumption
 (2) temperature-dependent consumption
 (3) monthly average temperature ($^{\circ}\text{C}$)
 (4) difference from average heating temperature (10°C)

Naturally, in addition to satisfying the amounts judged to be necessary, there are also consumers equipped with buffer and alternative heating systems. For exceptionally cold times or prolonged shortages of natural gas, the authorities that supervise Hungarian energy have worked out a schedule of rationing.

Security and continual operation of the gas-pipeline system are assured through observance of conditions during planning and construction that are strict even by international standards, by corrosion and cathodic protection, by daily inspection, and by the OKGT's damage-prevention system.

Economic gas distribution and gas supply in populated areas has been helped by the installation in increasing proportion of plastic pipes in the medium- and low-pressure distribution system and further by the introduction of high-pressure gas supply.

Natural Gases Containing Carbon Dioxide

As a result of natural features, we have available reserves of combustible and partly-combustible gases as well as pure carbon dioxide, which have been utilized by Hungarian industry. In Mihaly and Repcelak, natural gas containing some 1.5 percent is purified of heavier hydrocarbon fractions by the absorption method, and the carbon dioxide is distributed in seltzer cartridges, bottles, and truck containers, as liquid and dry ice. It generates a significant amount of hard currency.

Utilization of accompanying gases with large carbon-dioxide content takes place at the glass factory in Oroshaz, where the high thermal capacity of the carbon-dioxide content is also favorable for melting glass. The heat of combustion of the gas is 12.14 million joules per cubic meter. Natural gases with a heat of combustion of 29.01 million joules per cubic meter are used for heating in populated areas and for industrial consumption, and as a result of successful pilot tests, we have methods available for enriching the combustible portion of gases containing carbon dioxide.

Beginning in 1983, half a billion cubic meters per year of natural gas with large carbon-dioxide content will be used in power plants. After successful pilot tests, clean gases containing carbon dioxide may be used in the magnesite industry.

Propane-Butane Gas (PB gas)

Data concerning the 10-year development of propane-butane gas and projected usage for the next period can be see in Table 5 (Figure 10). Significantly, natural-gas mining has tripled the production of propane-butane in 10 years.

Distribution by area to individual districts takes place through filling stations and then through exchange stations in the populated areas. The number of households using propane-butane will be 2.54 million in 1985, and in 1990 there will be 2.7 million. This means that the number supplied with propane-butane will reach 70 percent.

In order to meet seasonal demand for propane-butane, a 30,000 cubic meter atmospheric storage tank is under construction at Algyo, the largest gas field. This will be placed into operation during 1982.

Table 5. Production and Use of PB Gas (kilotons)
(1970 - 2000)

Type	1970	1975	1980	1985	1990	2000
Source						
total domestic production	129	201	317	311	311	355
of this:						
from mining:	75	237	237	131	131	75
petroleum refining by-products	54	80	80	180	180	280
Import	41	20	20	20	20	20
Bottled remainder	5	11	11	10	10	10
Total sources:	175	348	348	341	341	385
Usage:						
--domestic consumption in bottles and small tanks	170	268	268	319	319	385
--other	5	80	80	22	22	--
Total [usage]	175	348	348	341	341	385

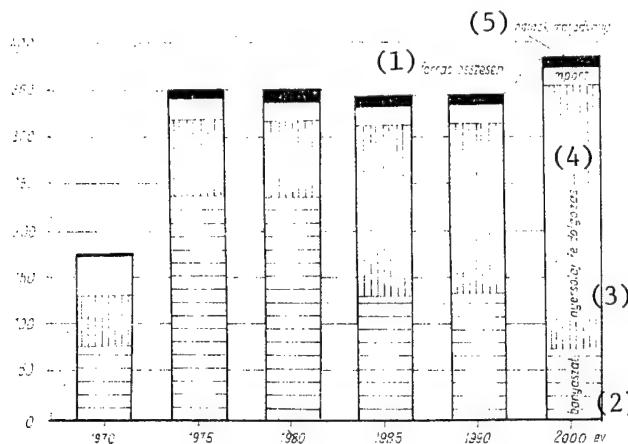


Figure 10. Production of PB Gas

Key:
 (1) total sources
 (2) mining

(3) crude-oil refinings
 (4) import
 (5) bottle remainder

Price Policy

The evolution of wholesale and retail price relationships of energy providers (Tables 6 and 7) has been influenced at various times by national considerations of supply, production, and social policy.

Table 6. Retail Prices

(in percent)

	<u>1968</u>	<u>1973</u>	<u>1975</u>	<u>1980</u>
Coal (domestic + import)	100	100	100	100
Charcoal (domestic + import)	163	133	124	124
Coke	169	171	182	189
Firewood	205	170	163	169
Natural gas	123	166	174	167
City gas	232	222	229	219
Total gas	194	190	196	188
Household heating oil	267	195	209	217
PB gas (11 kilogram units)				
at exchange stations	255	267	300	243
home delivered	332	348	300	293

Table 7. 1981 Annual Base Price for Large Operations

1981 annual base price for large operations	
Natural gas	90 forints per million joules per hour
Town gas	90 forints per million joules per hour
Gas price	
Natural gas	7.3 fillers (million joules)
Town gas	12.0 fillers (million joules)
Price for general usage	
Natural gas	45 forints (cubic meters per hour) month
Gas price	
Natural gas	17 fillers per million joules
Town gas	12 fillers per million joules
Buffer	
Natural gas base price	--
Gas price	7.3 fillers per million joules
Natural gas for the chemical industry	
Gas price	3,180 forints per 1,000 cubic meters
For the Capital City Gas Works	
Gas price	7.1 fillers per million joules
Wholesale price of PB gas	2,250 forints per ton
TEK [Capital Equipment Marketing Enterprise] price	3,720 forints per ton by container truck 4,000 forints per ton in 11 or 22 kilo- gram containers at exchange stations 6.1 fillers per million joules for house- hold use=0.0062 forints per million joules for household use.

In recent times, as the result of the increased cost of hydrocarbon energy there has been a natural tendency that those consumers who can choose should turn to domestically-produced coal and to natural gas, which can be obtained relatively easily. The MFMT, which buys large amounts of gas for the production of electricity, has a large role in the structure of gas consumers. One reason for this, among others, is the fact that during the summer months the arrival of seasonal imports is antiseasonal, but domestic production is limited by domestic demand for propane-butane. As is well known, the peak demand for PB gas is precisely in the summer, when in fact we should be limiting domestic gas production in order to be able to accept a large quantity of imported Soviet gas.

As a final thought in summary it can be stated that the growth of natural-gas consumption in Hungary during the last 20 years has been strong, and we hope that this tendency will not stop in the coming period either.

Strong growth in natural-gas consumption is promised by the world and especially the Soviet natural-gas reserves and solution of the technical problems of transporting them, by the favorable characteristics of natural gas, and by the energy market that has developed.

9611
CSO: 2500/313

HOUSING SITUATION, PROBLEMS DISCUSSED BY DEPUTY MINISTER

Budapest MAGYAR HIRLAP in Hungarian 9, 10, 11 Sep 82

[9 Sep 82 p 8]

[Interview with Deputy Minister of EVM [Ministry of Construction and Urban Development] by Tamas Foldes: "Housing Problems. Deputy Minister is Cautiously Optimistic--Should We Build Semi-Finished Homes?"]

[Text] We have become careful about making predictions. At the beginning of the 1960's, when our first 15 year housing development program aimed at completing 1 million new homes went into effect, there were some who thought that by the mid-1970's or by the early 1980's at the latest housing shortages would be a thing of the past. The plan was overfulfilled: during the decade and a half between 1960-1975 even more than 1 million dwellings were built in Hungary; during the 6 and 1/2 years that have elapsed since then another half a million have been added to our housing stock, yet despite all this the housing shortage (especially when it comes to providing homes for our young people) continues to be one of our most pressing social problems even today.

The numbers speak for themselves. Even though we have built 1.5 million apartments in 20 years, we have also had to tear down more than what we had anticipated (or could it be that we did not really have to were it not for the unjustifiable open-handedness of some of our decisionmakers?). Consequently, even compared with the 2.758 million level of 1960, in 1980 we still only had 3.544 million apartments in place; the actual increase for the past two decades, therefore, has been only 786,000 (in other words, hardly one-half of our newly built homes!). At the beginning of the 1960's there were still 349 residents for every 1,000 dwellings, and by the early 1980's this has dropped to 404; at the same time, the number of persons per room has also declined from 200 to 145. However, 27 percent of our homes are still one-room units, 49 percent have 2 rooms, 37 percent are without amenities and 12 percent have only running water an lavatory. Therefore, in addition to those who have no homes at all we also have people expecting a new roof over their heads who justifiably hope for a more spacious and more modern home to improve their living conditions.

Today nobody is willing to make long-range predictions, for it will be still some time before our market of demand can become a market of supply (if that can ever happen). The situation of home seekers have been further exacerbated

by the fact that there have been increasingly less central funds available for new housing construction projects. During the 1980's we expect to build about 750,000 homes, only 20 percent of which will be state-owned, private initiatives, therefore, are expected to play an even more definite role than before...the trouble, however, which people building on their own are forced to go through has been a source of nerve racking tensions for decades. If they have a plan they do not have a lot to build on; if they have a lot they do not have a contractor; if they have a contractor their material supplies are not steady; when there is enough material and also a contractor to do the job then the prices start changing and they begin to run out of funds.... Building a home is one of the most complex undertakings: it requires time, money, patience and often also expertise and good physical condition. But is there really no movement in the background, or have our recent--and presently contemplated--measures and new initiatives helped to ease the situation of those building on their own?--it was in search of an answer to this question that we went to the Ministry of Construction and Urban Development, the National Savings Bank and elsewhere to file these series of reports.

In a Vulnerable Position?

I put the following question to Antal Jantner, Deputy Minister of EVM:

[Question] Are builders still in a vulnerable position?

[Answer] The vulnerability of our builders has changed in accordance with the change, or the lack of change, in the relationship between demand and our available building capacities. While construction demand has undoubtedly declined in recent years, there has been an even greater drop in the number of people employed in the construction industry. Although it is true that when they get to their new jobs most people who leave the enterprises continue to work in construction, if they go to a small-scale operation their productivity becomes low. Plainly speaking: it is still not easy to find a contractor.

The problem, of course, is not with family houses or with multi-story buildings constructed using modern technology: most family homes are domestically built with the collaboration of colleagues, by way of voluntary cooperation or with the help of private artisans. One of the important considerations in choosing this route is that it can save the builder approximately half of the labor cost. In general, the building of prefabricated and tunnel-support construction residential buildings is within the domain of the local councils, so here also future owners determined eligible to buy a new home enjoy a relative advantage. The problem is between these two types of construction: i.e., with small owner-occupied apartment houses. They are too small to be built by a large-scale enterprise, but they are too large to complete in voluntary cooperation. They are usually constructed by coops and ad hoc associations...and most of the time it is here where we find problems in planning and organization. And it is a pity, because small apartment houses are efficient building forms.

[Question] It is also becoming increasingly harder to find places to build....

[Answer] This is because we are running out of vacant lots which could be built up. Yet in spite of this we have been able to make some advances in land management. We are presently working on a measure that will systematize the conditions and possibilities for the permanent leasing of state land.

They Should Not Cause Any Damage

[Question] The problem is that these leased plots are becoming increasingly more expensive. The local councils are offering them at "market value", in other words at almost the same price owners of privately held building sites are asking for theirs.

[Answer]...Let me respond by asking you a question: and what if, let us say, the councils were selling them at half price? Where would they make cuts, i.e., what would they use to make up for the loss of important revenue needed for other communal purposes? But since we are talking about the councils: they are providing increasingly greater assistance to builders, often for merely token compensation. One after the other, they have been setting up adversary and organizing groups; one such office was just opened in Budapest. Something has just happened in Debrecen which is worthy of attention: the council there has allocated and advanced enough land to build almost 300 private apartments, at the same time, the OTP [National Savings Bank] has advanced money to cover the construction costs, the EVM has granted the right to start planning and now the Hajdu megye State Construction Enterprise is building homes for sale at a later date. To put it simply: taking advantage of this assistance from the authorities the enterprise has entered the market as a contractor. The leaders of Bacs megye, and later others as well, have expressed similar intentions. This enterprising spirit has many benefits. There is no need to look for a contractor since that function is performed by the builder itself. Planning costs become lower, the builder can make more profitable use of the land thus reducing utility costs; presumably, the journeymen take greater care to ensure that they do not damage each other's work. The enterprise is not pressed to meet deadlines and the project can increase its profits. As for the future owner: he will not pay any more than what a construction project dragged out for perhaps several years would cost and he can get a home without any preliminary procedures.

[Question] The demand for private apartments that can be purchased with cash is nothing new, but why is it still so hard to find an enterprise willing to build at its own risk?

It is Not Necessarily Good

[Answer] The regulatory, financial and credit conditions of these types of undertakings still have not been completely worked out; there is no precedent or practice to build on. The EVM, however, supports and encourages these initiatives because we feel that it can only be beneficial for everyone concerned. We expect a similar form to take hold in Budapest: we already have several rural enterprises working in Budapest, one from Veszprem megye has established as many as two subsidiaries here, but even Number 43 has found it profitable to go ahead and build sections of 1,000 to 1,500--although not more if possible--apartements on its own. Our Budapest-based large-scale

enterprises no longer have to be urged to do this: they themselves have recognized the benefits they can gain from it. It is also certain that some of our small businesses will show similar willingness to build now and sell later. The palette will definitely become more colorful.

[Question] In order to cut costs there has been much talk about building semi-finished apartments to be completed by the future owners.

[Answer] These only create arguments. It is not necessarily a good solution for everyone. It may happen, for example, that due to a lack of money and strength the new occupant is not able to complete the work for a long time. Hence, this could in fact also lead to the creation of a system of permanently unutilized units. It is a fact, of course, that these semi-finished apartments could ease the pressures on the construction industry caused by its limited finishing capacities. We should make a more thorough assessment of what it is that future owners are able to undertake themselves. Installing the parqueting or the carpet floor, and putting up the wallpapering are not likely to exceed their means. Our central policies also emphasize this construction form. The Ministry, therefore, has taken everything there is to know about semi-finished and improvable housing construction solutions and combined them into an information pamphlet.

[Question] The recorders of construction affairs have told us time and again that most construction material are no longer in short supply. Our builders have a different opinion....

[Answer] Material shortages have significantly improved, but the storage capacity of TUZEP [Fuel and Building Material Trade Enterprise] is still extremely dismal. It tears my heart out when I see how they store cement and brick in some of our stock yards. A few years ago we did a study to assess the amount of storage capacity that is still required: we would need billions to put things in order. At the same time, our material producing enterprises could also sell their products themselves...however, not all of them are taking advantage of this opportunity. A good example: in Solymar, and in a few other plants they also have a TUZEP office operating on the premises. Especially noteworthy is the case of small-size bricks, state subsidies for which were recently withdrawn. For years our experts have been saying that there are more modern products available, still the demand has not diminished. Now that its price has been regulated there may also be a drop in popular demand. And although there is still not much profit in it, at least now if somebody decides that he still wants to build his family house out of small-size bricks the national economic will not have to lose any money.

[10 Sep 82 p 7]

[Interview with Robert Angelus, Department Head, Main Department for Investments, Capital City Council and with Dr Endre Igaz, Director of VAEV [State Construction Enterprise of Veszprem] by Tamas Foldes: "Land-Waltz--High Leases. Situation Report from Budapest."]

[Text] Without a thorough examination of the numbers it may seem that the capital's housing situation is more favorable than the national average. The reason for this is that according to the data of the 1980 census, there are

almost 710,000 occupied residential units in Budapest (of which 273,000 have been built since 1960), and there are only 276 residents for every 100 dwellings compared to the average residential density of 306 in other cities and 313 in the villages. So what could be the cause of all these problems which seem more pressing than anywhere else in the country? More than likely the fact that it is here--and in Miskolc--where, after Debrecen, the average ground space of residential units is the lowest: 53 m² (the national average is 59 m²; 58 m² in the cities and 63 m² in the villages).

The ground space of 30.4 percent of the homes in Budapest is below 40 m², while in other cities and villages the percentage of dwellings with floor spaces that low is only 17.4 and 13.6, respectively. At the other extreme; hardly more than a quarter of the capital's residential units are larger than 60 m²; elsewhere this percentage is between 33.5 and 39. It is easy to see, therefore, why the situation in Budapest continues to be tense. The different generations who must live under one roof are finding it hard to get along, and increasingly more of them--especially the young married couples--would like to have a family nest of their own.

Toward Private Effort

During the Sixth Five-Year Plan period 86,000 to 92,000 new apartments will be built (a good many of them in the garret-space). Those building their homes on their own will be able to move into 20,000 settlement-type, and 2,000 collective, modern apartments; in addition, 6,000 to 7,000 dwellings will be built in the form of individual owner-occupied apartment houses and 7,000 to 8,000 as traditional family houses. We went to discuss all of this with Robert Angelus, department head in charge of private construction projects at the Capital City Council's main department for investments. This is the main department which oversees the building of "settlement-type" residential units; a construction project is classified as settlement-type if it means building at least 90 homes simultaneously. Providing public utilities for the area is the council's job, which at the same time also determines which institutions' workers are eligible to purchase these homes. (The capital city keeps a record of all enterprises which provide employer assistance to their workers in the form of no-interest loans or in other ways.) The apartments are either sold by the OTP, or their future owners can form a housing cooperative.

[Question] Where will settlement-type private apartments be built during the Sixth Five-Year Plan period?

[Answer] They will be scattered around various points of Budapest, but the capital city can also assign building sites among locally targeted residential buildings. Hence, while the building of targeted residential units is limited to 12 or 13 sections in Budapest, privately undertaken settlement-types construction will spread out over 50 to 60 different areas. The largest of these will be the 4,000 unit Pok street section projected to be completed between 1984 and 1985, where 50 institutions have received the right to appoint buyers. The building plan, which also takes into account the principles of city planning, is manifold: approximately 1,000 homes will be housed in ten-story buildings, 2,300 in four-story ones and 700 in two-story row houses.

Although originally we were talking only about 20,000 settlement-type private apartments, already so far we have issued almost 24,000 homebuilding permits: the investment programs are ready to be implemented and the contractors have already been appointed. And since even in the capital city there has been a growing trend toward private effort, changing their plans they have decided to prepare investment programs for 28,000 apartments (if the funds available for targeted construction projects begin to dwindle, their place is automatically taken over by settlement-type privately undertaken projects).

The Tension Remains

[Question] Housing construction in Budapest has often been hindered by a lack of capacities. Now that some of our rural enterprises have also established a permanent presence in our capital, has the situation become more favorable?

[Answer] Yes, it has improved somewhat compared to what it used to be, but the background of our construction industry is still not without problems. We also have new types of economic associations: we are trying to give all interested contractors an opportunity to participate in housing construction. I must mention here: in order to make more efficient use of our public utilities, we could build as many as 30 more apartments around already existing residential buildings according to the same financial conditions which apply to settlement-type homes. If a builders' association with a contractor already lined up puts in a request, the council can provide them with land primarily in some of the vacant sites of Vizivaros, Pest, Terezvaros and Ferencvaros. However, many who would like to build still do not have a contractor to do the job.

The decision regarding the long-term leasing of state lands are made--based on the social committee's evaluation--by the 3rd district council. Under the Fifth Five-Year Plan 12,000 apartments were built this way. These lands are sold and leased at their realistic market value (although even this "realistic market value" is not low). As far as owner-occupied apartment buildings and family houses built on private lots are concerned: here also, the council--or councils--have considerable responsibility. They must put an end to inexpedient developments in the green belts of Buda which disregard the environment, and they must discard plans for buildings which do not blend with the landscape. One thing that might be of help for private home-builders is that since the beginning of June there has been an office for private home-builders operating downtown, on Kiraly Pal street. Here builders can get professional answers to any questions they might have, and the office, which is maintained by the Capital City Council, even provides some services. We have heard it before: we still cannot put an equation mark between our building capacities and builder demand. At the same time there are six building factories which are underutilized and there are several megye enterprises which are trying to find ways of making their presence in Budapest even more pronounced. A Veszprem enterprise has chosen a seemingly expedient solution: as we have already reported, in early February they established two subsidiaries in the capital. The goals and possibilities of this undertaking were summed up by Dr Endre Igaz, director of VAEV [State Construction Enterprise of Veszprem]: their building factory would only have been utilized to 65 percent capacity

and had they not made some kind of move the enterprise would have started losing money, it would have been unable to repay its loans, in other words, it would have gone bankrupt. It was in searching for a way out that they decided: they would set up organizations which would make it possible for them to market their building factory's products not only in Veszprem, but also in the neighboring megyes.

Our family house and row house models have won awards at the 1981 Budapest International Fair, and as early as this year we will bring 100 two-story units into use on Ifju Garda street. Under the present five-year plan, the Capital City Council and the OTP need 3,000 new apartments, so we are able to use our building factory to 100 percent capacity.

It Can Also Be Made of Panel

[Question] What areas are you willing to move into; where is it profitable for you to build?

[Answer] The only areas which the large-scale enterprises of Budapest are not interested in are vacant lots and areas where no more than 50 to 100 residential units can be built. Our economic situation has forced us to look for markets with purchasing power; so we have also accepted contracts to build up vacant lots. As our debut, we have an experimental project under way in downtown Budapest on Vadász street, where we are building a home for the elderly out of panel. After we see how it works out we wish to continue this work. During the second half of the year our Buda subsidiary is going to begin construction of a 70 unit row house in the vicinity of the Koranyi hospital, while our pest subsidiary is expected to build about 800 apartments in the Centenarium housing settlement.

[Question] These apartments are sold by the council or by the OTP. But will it be possible for someone to buy a private apartment directly from the enterprise, or to have them build a home for him from building factory-made panels?

[Answer] Entering into agreements with housing cooperatives is already possible; of course, the right to appoint continues to belong to the council, and the financer is still the OTP. We are ready to build these types of apartments on a full-time basis...if they issue a decree allowing us to take out an advance loan to begin the project. Our subsidiary, which is renting its equipment, is ready to put up even family houses. I must add here: in order for our subsidiary to survive, it must devote half of its activities to working on free-price subjects.

[Question] How much does a Veszprem panel-apartment cost in Budapest?

[Answer] On Ifju Garda street they run 9,500 forints per m². In Veszprem we can build similar homes at a price of 7,000 to 8,500 forints per m². This, of course, does not include the price of the land or the costs of public utility installation.

As Antal Jantner, Deputy Minister of EVM put it in yesterday's interview: the palette is definitely becoming more colorful. However, in order for us to make more profitable use of these new opportunities, we need greater flexibility.

[11 Sep 82 p 6]

[Interview with Gyula Torok, Manager of OTP's Directorate for Apartment Construction and Credit, by Tamas Foldes: "Price, Value and Trade--New Credit Conditions Under Way"]

[Text] The costs of building a home--in the case of larger-than-average private apartments--are close to, and sometimes may even exceed 1 million forints. Someone who wants to build his future home with the help of professionals rather than by relying on voluntary cooperation must be prepared--when we include the price of the land--to work with seven-digit numbers.

At the end of last year, they completed a model panel-construction residential settlement in Farkasret, on Beregszasz street: some rural construction enterprises built it to show what they can do. These modern--and for the purposes of the exhibit specially furnished--family houses were open for inspection by anyone for 2 weeks; subsequently, they were put on the market. Potential buyers were "made to compete" for 43 apartments, and the lucky ones were able to get into a new home at a price of 12,000 to 15,800 forints per m². Why were they lucky? Because they did not have to suffer through the various agonies connected with building a home. They paid, and they could move in. In Rakospalota, the apartments built by the Veszprem enterprise on Ifju Garda street are somewhat cheaper: they cost 984,000 forints, at (also including the land) 11,056 forints per m². The buyers of those owner-occupied row houses did not have to compete: they are being sold by the council and the OTP.

User's Fee

Few people have millions ready to spend--especially in cash--but for those who already have an apartment it is easier to make a move. It is becoming increasingly evident that by way of gradual trading a single new apartment can solve the problems of two (or even more) families. We went to the National Savings Bank to talk with Gyula Torok, manager of the Directorate for Apartment Construction and Credit, about these possibilities. We have learned, that presently there are two ways of trading personally owned apartments. One possibility is by way of an organized trading scheme which is subject to certain conditions: the reasons for the trade must be justified. These may include health reasons, change of jobs and of course the fact that the growing family has outgrown its old home. These kinds of trade are handled by the councils and the enterprises. Today former homes may be traded for newer and larger ones even without a strong reason...the financial conditions, however, are less favorable. In the case of organized trade, the person purchasing the old home with OTP assistance does not have to pay any property transfer fees, whereas under the other scheme 7 percent of the purchase price must go to the duty office.

In both cases, the old apartments are bought by the OTP which takes into account their location, their assets and liabilities and their actual market value (charging a 2 percent handling fee for this service). What is extremely important about this is that the seller is allowed to remain in his old home until his new apartment is completed. In the case of an organized trade all he pays is a user's fee in the amount of his rent; the other version is not quite as advantageous: the payment in this case is 2 percent of the purchase price in the first year, 4 percent in the second and after that 6 percent every year. It does make a difference, therefore, how long it takes to complete the new, better-than-the-old dwelling.

If we are talking about apartments worth over a million, how much money would it take to make such a step? Surprisingly, much less than it does to buy one's first privately owned home. In the case of organized trades, the council appoints the buyer and there is also a guaranteed maximum OTP loan which can be taken out. If this is coupled with a more substantial enterprise assistance, it could even happen that a given family could move into a larger apartment without any cash down. The loan payments, of course, could hardly be considered small: the maximum OTP credit is 320,000 forints, and the enterprise assistance may exceed 100,000.

We would like to emphasize the word: today. New credit conditions are being worked out in accordance with the guiding principles that have been laid down by the Central Committee of the MSZMP and the Council of Ministers. They will be made known in the near future in conjunction with our new system of housing management. This change--which is being made by taking also into account the experiences drawn from social debates--will give greater consideration than before to our families' actual needs. This is one of the reasons why we have chosen not to deal in great detail in this report series with home construction and purchasing-related OTP loans; the present possibilities can be read about in a special printing of the May 1981 issue of the publication, entitled HAZI JOGTANACSADO [Home Legal Adviser]. Here we will only quote one paragraph: "The extent and the upper numerical limit of the amount of loan which can be granted for new home construction, and of credits which can be extended for home purchases may vary, depending on the form of construction, and in the case of family houses, on the location of the construction. It may go from 50 to 90 percent, or from 160,000 to 320,000 forints. (In the case of apartments sold by the councils there is no upper limit.) The maximum maturity period of loans may similarly vary: from 25 to 35 years. The new regulation will presumably make it clear that in housing construction there has been an exponential shift in emphasis over to private effort.

OTP's Role

The savings bank not only lends, it also builds: last year 16,500 new dwellings were built this way. Seventy to 80 percent of them go to council-appointed buyers (here we must also mention those homes which have been built, mainly in Budapest, on instructions from various enterprises; here the financial institution is asking 2 percent of the construction costs for handling the investment). The buyers for the remaining 20 to 30 percent are appointed by the OTP; preference is given to those who can pay the largest portion

of the selling price in cash (in the case of identical offers they also take into account such factors as social status and the person's number of children).

[Question] Two percent of the construction costs is not a large sum. Undoubtedly, there are many who would be happy to be able to avoid the various complications connected with construction and to be able to buy their homes directly from a real-estate office. Could the OTP perform such a function; what prevents it from building more apartments by making its own investments?

[Answer] Perhaps our skilled apparatus would be suited for this job--answered the manager of the directorate for housing construction and credit--, but it is the councils which prepare the construction site and make it available to the OTP. Knowing the demands, however, the councils justifiably insist on their right to appoint the buyers. In spite of this, the Beregszassz street initiative will continue; to some extent, this was also the way the above mentioned construction on Ifju Garda Street was handled. Some of the new sites earmarked for similar development include Arnyas street, Pok street and Tallya street. To mention some rural examples: in Uj-Szeged 1,000 apartments will be built, most of them under this type of marketing arrangement, at a price of 10,000 to 11,000 forints per m^2 , in Kecskemet on Vacsi land 6,000, and in Gyor on Pava street 60 apartments.

Addresses Posted

[Question] What does one have to do to buy a used private apartment which was repurchased by the OTP?

[Answer] The addresses are posted at the regional and district branches of the OTP, and also in our central office on October 6 street. It is a fact, of course, that the list cannot be read for long; these apartments soon find a buyer. For here on the free market the price has been established at 9,000 to 12,000 forints per m^2 , as opposed to the sometimes 16,000 forint level elsewhere. Last year, private homes of an average size of 56 m^2 sold by the savings bank could be bought for 505,000 to 534,000 forints by their present owners.

[Question] Is it easier, therefore, to buy or build a house now, at the beginning of the 1980's than it was in the 1970's?

[Answer]...In the country it is easier. In Budapest, there has not been much change....

9379
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POLAND

SPECIAL CURRENCY EXCHANGE RATE TABLE PUBLISHED

Warsaw TRYBUNA LUDU in Polish 6 Sep 82 p 7

[Text] Announcement of Exchange Rates Table No 36/82, effective 6 September 1982, by Stanislaw Nieckarz, vice president, Polish National Bank, Warsaw, on 6 September 1982.

I. Foreign-currency exchange rates in zlotys for countries of the first payments area [socialist countries] for commercial and noncommercial payments remain unchanged.

1. Exchange rates for commercial payments.

Country	Curr Symb	Currency	Foreign Exchange		
			Purchase 4	Sales 5	Average 6
CEMA countries	101	1 transferable ruble	67.66	68.34	68.00
Albania	315	1 clearing ruble	67.66	68.34	68.00
North Korea	319	1 clearing ruble	67.66	68.34	68.00
Laos	322	1 clearing ruble	67.66	68.34	68.00
Vietnam	320	1 clearing ruble	67.66	68.34	68.00

2. Exchange rates for noncommercial payments.

Country	Curr Symb	Currency	Foreign Exchange and Money		
			Purchase 1	Sales 2	Average 3
Albania	215	100 lek	213.92	216.08	215.00
Bulgaria	202	100 lev	4,884.54	4,933.64	4,909.09
Czechoslovakia	203	100 koruna	429.84	434.16	432.00
North Korea	219	100 won	1,243.75	1,256.25	1,250.00
Cuba	208	100 pesos	3,227.02	3,259.46	3,243.24
Mongolian PR	204	100 tugriks	856.93	865.55	861.24
East Germany	205	100 marks	1,343.25	1,356.75	1,350.00
Romania	206	100 leu	431.56	435.90	433.73
Hungary	207	100 forints	291.42	294.34	292.88
Vietnam	210	100 dongs	375.08	378.84	376.96
USSR	201	100 rubles	4,298.40	4,341.60	4,320.00

In purchases of travelers' checks for rubles, issued by the USSR Foreign Trade Bank and payable outside the USSR in the currency of the country where cashed, an exchange rate of 11,811.10 zlotys per 100 rubles is applied.

II. Foreign-exchange currency rates in zlotys for countries of the second payments area [capitalist countries].

Country	Curr Symb	Currency	Foreign Exchange		Money		
			Purchase 4	Sales 5	Purchase 1	Sales 2	Average 6
Saudi Arabia	771	1 rial***	25.07	25.33	--	--	25.20
Australia	781	1 Austral.dollar	89.42	90.32	88.07	91.67	89.87
Austria	786	100 schillings	490.42	495.34	483.02	502.74	492.88
Belgium	791	100 francs	179.78	181.58	177.07	184.29	180.68
Denmark	792	1 kroner	9.85	9.95	9.70	10.10	9.90
Finland	780	1 markka	18.03	18.21	17.76	18.48	18.12
France	793	1 franc	12.28	12.40	12.09	12.59	12.34
Greece	724	100 drachmas	121.59	122.81	105.39	124.64	122.20
Spain	785	100 pesetas	76.36	77.12	75.21	78.27	76.74
Holland	794	1 florin	31.41	31.73	30.94	32.20	31.57
India	543	100 rupees***	894.85	903.85	--	--	899.35
Ireland	782	1 pound***	118.35	119.53	--	--	118.94
Japan	784	100 yen	33.20	33.54	32.70	34.04	33.37
Yugoslavia	718	100 dinars	177.87	179.64	154.16	182.34	178.76
Canada	788	1 Canad.dollar	69.58	70.28	68.53	71.33	69.93
Kuwait	770	1 dinar***	295.93	298.91	--	--	297.42
Lebanon	752	1 pound	16.91	17.09	16.66	17.34	17.00
Libya	651	1 dinar***	291.34	294.26	--	--	292.80
Luxembourg	790	100 francs	179.78	181.58	177.07	184.29	180.68
Norway	796	1 kroner	12.80	12.92	12.60	13.12	12.86
Portugal	779	100 escudos	99.61	100.61	86.34	102.11	100.11
FRG	795	1 mark	34.47	34.81	33.95	35.33	34.64
United States	787	1 dollar*	86.27	87.13	84.97	88.43	86.70
Switzerland	797	1 franc	40.42	40.82	39.81	41.43	40.62
Sweden	798	1 kroner	13.98	14.12	13.77	14.33	14.05
Turkey	627	100 pounds	52.76	53.30	45.73	54.09	53.03
Great Britain	789	1 pound**	147.82	149.30	145.59	151.53	148.56
Italy	799	100 lira	6.11	6.17	5.30	6.26	6.14

*Valid also in clearing accounts with the following countries: Bangladesh, Brazil, Ecuador, Greece, Iceland, Kampuchea, Colombia, Lebanon, Pakistan, Peru and Turkey.

** Valid also in clearing accounts with the following countries: Nepal and Pakistan.

*** The Polish National Bank does not purchase money in these currencies.

9295
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YUGOSLAVIA

CONTRACT ORGANIZATIONS OF ASSOCIATED LABOR DISCUSSED

Belgrade BORBA in Serbo-Croatian 9 Sep 82 p 4

[Article by Jovan Kozomara: "Distrust or Lack of Business Sense"]

[Text] In many places it has after all been understood that the opportunities offered by contract organizations of associated labor (ugovorna organizacija udruzenog rada) are extremely large. The opportunities for investment of capital from the economy have been reduced to a minimum; on the other hand, there are more and more individuals with large savings and a desire to invest the capital in a way that will not only give them employment, but will also employ others who are unemployed.

Until it is understood (especially in opstina staff services) that contract organizations of associated labor are not a "gold mine" whereby the workers who invest their personal savings in them become rich, the unprecedented opportunities--especially for giving employment to young people in this sector--will continue to be the subject only of talking and writing, as has been the case up to now. Although in many places it is often stressed that in the new investment policy the commitment of personal capital in projects and equipment which will produce a product or render a service is a good solution, in practice it is difficult to carry out many initiatives in this area.

It is no secret that the brakes are mainly in opstinas, in places where as a rule the documents are obtained and capital offered for construction or equipping small-scale production facilities. More than once there have been stories about how individuals returning from employment abroad--and willing to invest their foreign exchange savings in projects of this kind--have encountered an inexplicable lack of understanding on the part of staff services in the opstinas. There have been cases, many have reported, that they were offered the public explanation that they wished to turn over the capital that they already had in a hurry and triple it, while all of this would be done under the guise of providing jobs for some 20 or 30 people unemployed at the moment. Some people persisted in spite of this, without giving in to the comments, but many gave up.

The Fear That People Will Get Rich

From 1977 up to the end of last year 103 contract organizations of associated labor were set up in our country. It is evident that they are most numerous in a sector which in recent years has been "clumping along" behind others--that is, in construction (50). In industry and mining there were 15 of them, while in the craft and trade sectors of 33 individuals are willing to invest their capital in order to obtain employment for themselves. Hostelry, it is interesting, has not been attractive. There have been only two contract organizations, both of them in Slovenia.

It is in our most northern republic that the greatest number of establishments have been created to conform to the newest organizational form for the association of labor (23). In Serbia proper there are 21 of them, in Macedonia 17, in Bosnia-Hercegovina 14, in Croatia 11, in Kosovo 9 and in Vojvodina 8. It is obvious that in Slovenia, where this form of pooling labor and capital between individuals and opstinas first began, its roots are very deep, which is why contract organizations are most numerous there.

"We were not afraid that Bojan Stih (the investor in 'Tajfun,' the first contract organization in the country) would get rich quick. In any case, back then in 1977 he had 1.5 million, enough, that is, to be rich already. He put up his share, the opstina put up its own, and now today we already have a collective amounting to about 200 employees, their average personal income is high, and they have abundant capital.... Of course, Stih himself also did well, earned three average personal incomes a month, but all was regulated by legal provisions, and there was no room for hanky-panky. And from this transaction the opstina provided jobs for 200 young men and women," we were told in the Department for the Economy of the Sevnica Opstina Assembly.

Where there was no fear that individuals would suddenly become rich, contract organizations of associated labor have justified themselves. Not one of these 103 small-scale collectives has recorded losses from their establishment to the present time, and the earnings of those employed in them have been up or down depending on their performance and whether or not there was greater or lesser interest on the market for their goods (from an average of 5,230 in Macedonia to 12,700 in Slovenia). Certainly these averages would have been much higher had the enterprises not had large problems at the very outset obtaining skilled workers, of which there is a shortage both in large and also smaller centers.

The fact that last year personal incomes in contract organizations of associated labor were 6 percent lower than those in the economy or in industry and mining did not disturb any of them. Not a single worker has left his job and looked for a better one, since it is obvious that they are all aware of certain difficulties at the outset, but they also hope that with good work and better-quality goods it will be better in the very near future.

Constructive Sobering Up

Still the number of contract organizations is not large. On the contrary, specialists feel that in view of the demand generated by the economy, since it must have smaller organizations which would produce two or three articles to meet its needs on a specialized basis, there are not enough such enterprises. After all, just to mention only "Tajfun" of Sevnica; in it 200 employees do the work of putting together assemblies used in mowing machines. This is a small part that often fails on this agricultural machine, and it simply does not pay a large collective to make it.

Certain analyses have shown that contract organizations might be able to do a major part of their business in the service activities. For example, service centers for repairing household appliances represent only 4 percent of the small business sector, while in the more advanced countries they represent between 14 and 17 percent. This certainly creates an opportunity for many skilled technicians to operate without a license and without declaring their earnings. It is thought that more than 3,000 unregistered technicians are working in Belgrade repairing appliances used in the household.

Certainly it is difficult to put all the blame on the opstinas and their staff services. This sector was looked upon with a certain lack of interest in the past in the republics and provinces as well, that is, in those agencies which should have provided assistance in setting up contract organizations--as well as in the banks. The roots of this conception are related to the birth and inglorious end of the former GG enterprises [enterprises started by "groups of citizens"--translator's note]. Their defects and everything that accompanied their operation are often mentioned when contract organizations are discussed, although there is no reason whatsoever for this.

Certainly a constructive sobering up will be helped by enforcement of the new customs regulation, which makes it much easier to import equipment from abroad that is intended for opening small-scale enterprises of this kind. Provided he has spent 2 years working abroad continuously, any Yugoslav citizen can import the machines necessary to perform the activities for which he has the qualifications. The only condition is that these machines not be more than 10 years old in the year in which they are imported.

The issuance of these permits will not be in the jurisdiction of opstinas, since past experience has shown that it is there that the checks on rapid development of contract organizations of associated labor have created numerous problems. From now on such permits are to be issued by the appropriate agencies in the republics and provinces.

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